



**THE HENRY FORD**

**COLLECTING INNOVATION TODAY**

**TRANSCRIPT OF A VIDEO ORAL HISTORY**

**INTERVIEW WITH**

**WILL ALLEN**

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**SOYBEAN LAB, GREENFIELD VILLAGE**

**DEARBORN, MI**

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QUESTION:

01:00:37;17

I'll tell you, well, let's start, just tell us, we're here today at the Henry Ford, what were you doin' here today? Tell me a little bit about your speech?

WILL ALLEN:

01:00:44;04

I was here today just to talk about the work that I do, at Growing Power, and kinda to frame, what is happening in urban agriculture today, and kinda view into the future what I, what my take of, what the future will be like.

QUESTION:

01:01:01;29

And, well, tell me a little bit about that. I mean, I, I know you've had a lot longer speech. Somebody said there were seven hundred photos.

WILL ALLEN:

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Yes.

QUESTION:

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But, if you were to condense a little and tell what is Growing Power doing, and what's the future look like for...

WILL ALLEN:

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Well, when we started many years ago, we were a youth-serving organization that evolved into a multi-cultural, multi-generational organization. And today, we've gone from the one farm, to fifteen farms in three different, two different states, Chicago in Illinois and Madison, Wisconsin. And we went from me volunteering back in those days, to do this work, to sixty employees that are paid really good wages.

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One of the principles that I had as I was moving along on a continuum, is to make sure that everybody got paid well. And, you know, I think that's a really important thing as, in terms of how we are gonna sustain urban agriculture, which I think is gonna produce thousands of jobs. But, to have employees, because this is a different kind of farming. Takes a little bit different skill set to be able to grow intensively, on limited space.

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You start lookin' at farming in a different way. You look at

it in terms of square footage, instead of acres. So, it has to be very intensive because of the cost of production. The cost of production, and these high-valued spaces, greenhouses, and so forth, because the idea is to grow food year-round. It's one thing about eating, good, natural food.

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But, if you look around the country, there's a period of about six months. And, in the other six months, we don't have that good food. So, what we're doing is, demonstrating how you can do it year-round. And that's where the jobs come in, and that's where we have to group because you're competing. It's a very competitive situation when you talk about food, because the wholesalers pretty much control the system.

01:03:13;11

Industrial agriculture controls this system. So, we're competing against what is brought in from many miles away. And, the reason they're successful, is because they're the only show in town. So, we're trying to create a

situation where people have a choice, where they can buy locally, and there are benefits, because most people want local production. Eighty-six percent of people, last surveyed, they want locally produced food.

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But, right now, there's, not a lot of locally produced food, in most cities, less than one percent. So, we have a long way to go. It's a tremendous opportunity. There's a lot of talk. A lot of energy around, I wanna be a urban agriculturalist, you know. Young people have come onboard. There are a lot of small projects around the country. A lot of community gardens.

01:04:04;22

But, to really make it commercial, we're gonna have to scale it up. And, there are a lot of challenges. Probably one of the biggest challenges now is not, you know, inspiring people who wanna do it, but to really go into action, and to really grow soil, because soil is at the very basis of all farming. And, inside our cities, the soil is highly contaminated.

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So, to go out and get rotor tillers and other tractors, and start, you know, tearin' up the ground makes no sense because all you're doing is, we wind up growing in contaminated soil. So, composting is the thing that we do, growing soil is what we have to do. And there's plenty of materials to do that, in terms of the waste that we create, the waste that we haul out into the countryside, and put it in a big hole.

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The organic waste, in terms of vegetable waste, and things like brewery waste and, it's unbelievable. Even leaves, some cities are putting leaves in landfill. They're putting, horse manure in landfills. So, that, if we can rescue all of that material, and compost it, and turn it, and grow new soil, then we have a chance of really scaling this thing up. Otherwise, ten years from now, we'll still be talking about all the excitement, and really haven't moved from that less than one percent to, say, ten percent. Because, at ten percent, imagine the implications. Imagine the

environmental impact that we'll have when ten percent less trucks, driving across the country, from California.

01:05:48;08

Ten percent more jobs, in our country. All different types of categories of jobs because this new type of agriculture, involves, jobs like renewable energy. Folks that have to install renewable energy systems. We need the educators, we need educators. We need, I sat down one day, and I came up with a hundred different job categories.

01:06:15;24

We need planners. We need finance people too; we need business plans. You know, when we used to farm back in the old days, farmers didn't have business plans. They just went out, started growing food, and they hoped for the best. Well, we can't do that anymore. We have to plan these farms. We have to make sure that, they cash flow. And that's why renewable energy is one of the big, key pieces to operating your greenhouse, because the cost of production is what it's all about, because we're still gonna be competing against the big wholesalers.

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And, if they can bring in food cheaper than we can, restaurants have to look at, because they look at price. But, if we can be competitive by controlling the cost of energy, by controlling the cost of producing some of our inputs, then we can be competitive. So, that's kinda where we're at, you know.

QUESTION:

01:07:12;22

That's enough. That'll do. Hey, how did you get interested in this? I know you were from a family of farmers, right?

WILL ALLEN:

01:07:20;02

Yeah. My, father was a sharecropper from South Carolina that moved to Washington D.C. area, back in the '30s. And, for some reason, unlike many African-American males at that time, that was, you know, dropped their plow and mule, and headed north, he wanted myself and my brothers to learn about where our food came from. So, we had a small farm, while he worked off the farm, at a construction job, as a construction laborer.

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And, that was kind of a gift because, that I didn't realize at the time. I realize now. But, at the time, you know, we looked at it as, "Oh, we're doin' all this hard work, and our friends are out there, havin' a good time." And, our summers, I spent on the farm. And, we had to do our work before we could go out and play ball, or whatever, you know.

01:08:14;00

So, at the time, you know, being immature and not really understanding. But, it was really a gift. One of the gifts was the fact that we always had food. We had probably eighty-five, ninety percent of the food that we ate, we produced ourselves. So, having food is a very powerful thing to have. Many families, even though they might have some cash, they don't have a lot of food.

01:08:40;05

And, we were able to share that food with our extended family and friends. People seemed to always gravitate to our house around dinnertime. And, my mother was one of

those, she also comes from, a farm background. Her family was in farming for over four hundred years. And, many of my uncles were farming in South Carolina at the time when I was growing up. So, you know, we were always around food.

01:09:07;20

And, my mother, being this wonderful cook, she used to fix enough food to, for probably thirty people every day. So, people started comin', and once I started playin' ball, all my teammates would come to the house, and that's how friendships were built. So, food is not just food in itself. It also is a community building tool and a friendship building tool.

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And, it seems that my parents really understood that. And, 'cause we didn't have a car. We didn't have a T.V., or anything like that. But, it seemed like we always could get places, 'cause people were always at our house. So, if my parents had to go somewhere they always had a way to get there, or we had a way to get there because of the

food. So, the food, in my estimation, is the most important thing in our lives, whether we realize it or not.

01:10:00;19

A lotta people put other things [first] and say, "Oh, this is more important than food." But, without food, we wouldn't survive. So, we have to start with the basis of food. And, I don't think we can have these sustainable communities. Everybody's talking about sustainability, sustainability till, you know. You hear about it all the time. And, we wanna live in these safe, sustainable communities.

01:10:22;18

But, if you don't have a strong food system, if you have a portion of your community that's food-insecure, you can never call yourself a sustainable community. So, food is at the very basis. I don't see why anybody in a community would wanna do anything if they're hungry. Kids can't learn, that's been proven, that kids that go to school hungry, they don't learn. So, you know.

QUESTION:

01:10:50;07

One of the problems is that, you know, the national supermarket chains, at least, they won't build stores in some of the urban areas.

WILL ALLEN:

01:10:56;05

Right.

QUESTION:

01:10:56;19

So, I mean, but if you had your choice, would you rather have the local people learn to grow their own food, or would you rather have the stores come in and sell 'em food?

WILL ALLEN:

01:11:03;12

Well, I think it needs to be combination of both. Food, we need to have grocery stores in our cities, in these so-called food deserts, even though I don't like that term. But, seems like everybody's using it and, it's easy to understand where there are no food stores for, you know, say four miles. Where we have our facility in Milwaukee, there's not a box grocery store within four miles.

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But, there's a reason for that. Many of the major groceries have pretty much, like the banks did in real estate, they red-line these communities, and they decide, "We're not gonna put a grocery store in this poor community." Maybe because of fear, or whatever, even though it's been proven that there's economic viability, that poor people eat a lot of food. And, but, they don't, they seem to red-line, so there's, a lotta, discrimination, in those areas, especially with the big box stores.

01:12:05;13

I would say the only corporation I've seen that's makin' a move toward coming into inner cities is Walmart. And, of course, they get maligned in a number of different ways. But, I think we have to look at them a little bit differently today than we did fifteen years ago. I think a lotta people are still hung up on, you know, when Walmart started and moved into communities, and little businesses, you know, we lost a lotta hardware stores, and other businesses.

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But, Walmart is, starting to do some really important

things. For example, I've been working with, First Lady Michelle Obama in the *Let's Move!* program, which is to alleviate childhood obesity. Walmart has just made a declaration to her that they're gonna reduce sugar and salt in their products. So, that's a really big thing since with our leaders in the grocery industry now.

01:12:58;12

And, they are, also are working with us, in terms of, we pick up, waste from ten of the Walmart stores to compost. We have their associates volunteering at Growing Power. We're gonna have a section in ten of the stores in our area, with our product, goin' into those stores, and being labeled, "Local." So, you'll be able to walk in the Walmart store if you wanna buy our product. There's gonna be a local banner that says, "This is Growing Power, locally grown produce."

01:13:31;19

So, those are some big, big things. And, they've made a national declaration to buy more local food all over the country. So, I think we have to have them at what I call

the "Good Food Revolution" table, because we need everybody. Corporate companies, the medical folks that are now onboard, the educators that are now onboard, the universities. Politicos, many planners, many top down operators are now starting to join the good food revolution, which is a good thing. And it's gotta be run by the grassroots folks.

01:14:06;18

So, how many times can you think of movements where that started, grassroots, where the grassroots folks control it, that top down operators wanna join? So, it's kind of a unique thing now that, you know, almost every corporate company has a sustainable mission that they want to, they're lookin' for ideas; how they can become more sustainable, because the number one question that young people graduating from college, before they make their, if they've got a choice of going to this company, or this company over here, the company that has the better sustainable practice is, they seem to wanna go to. That's the number one thing, is that, Kohl's Corporation told me,

in their interviews with perspective hirees, is that thing they get asked, "What are your sustainability practices?"

QUESTION:

01:14:59;13

Let me ask you this, jump back a little bit, get a little chronology here. You're on the farm, you're the food family.

WILL ALLEN:

01:15:04;27

Right.

QUESTION:

01:15:05;11

You start playin' basketball. Just take me, quickly. I mean, take a few minutes.

WILL ALLEN:

01:15:09;15

Okay.

QUESTION:

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But from there, all the way up through, some corporate jobs and into Growing Power.

WILL ALLEN:

01:15:13;14

Right.

QUESTION:

01:15:13;15

Just so we have that story.

WILL ALLEN:

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Now, when I grew up on the farm and, you know, I remember going back as five years old, I had my first marketing experience at about seven years old. Well, we used to shell, I don't know if you know what Fordhook limas, those are the big limas, not the baby limas. We used to shell those, put 'em in quart containers, put 'em on the wagon, and go door-to-door in a new subdivision and sell 'em door-to-door, for seventy-five cents a quart. Now, I wouldn't sell them for under six dollars, seven dollars a quart.

01:15:46;14

But back in those days, you know, that was probably pretty good money. Seventy-five cents a quart. And then, as I started to grow up, I started growing real fast and got big. And, I played baseball early on. I didn't know what basketball was until I was thirteen. And my brother brought a basketball home from junior high school and gave it to me.

01:16:10;24

And, I kind of fell in love with the game. I used to sleep with a basketball. And, I got one of the friends in junior high, his uncle was the head basketball coach at American University in Washington D.C.. And, we got summer jobs tending, cleaning up the swimming pool area that was right next door to the basketball arena, where the players practiced.

01:16:36;13

And many of the players had, college players had to go to summer school. So, I started playin' against college guys when I was thirteen. So, by the time I got to high school at fifteen, you know, playin' against high school guys was kinda easy. And, I became a high school All American in two years after picking up the game.

01:16:58;04

And then, when I graduated high school, I had over a hundred scholarship offers. And, I went to University of Miami. I visited about five schools, University of Indiana, visited Temple, University of Houston, Penn State, and St. Bonaventure's, at that time. And, then I kinda rejoiced. I

said, "Never again will I do this farming stuff," you know. "I'm gonna go to college and get [an] education, and play professional basketball." That was my goal.

01:17:34;03

I definitely had some goals at eighteen. And, when I, so, I'm leaving the farm, never to go back to that hard work 'cause I had missed so much, you know. I thought I had missed so much, being immature, thinking at that time. And then, when I got outta school, I played in the American Basketball Association, and then I went to Europe and played in Belgium.

01:17:56;03

Well, while I was in Belgium, one of my Belgian teammates, his family was in farming. And, he invited me out to the farm one day to help 'em. He said, "We need some help. We're gonna be diggin' some, potatoes, diggin'," actually, "We're gonna spade up some ground to plant potatoes," you know? And, he needed some help. So, I went out there. And, as soon as I started doing that, I felt something that was a transformative moment for me.

01:18:24;09

I realized something was missing. I really liked doing this stuff, you know? I had missed it. And, I actually started, I went back to the team because they're responsible for getting your housing, and so forth. So, I was living in the city, small town. I asked them to find me a place in the country. Started growing food out there. I got twenty-five chickens, and here I was, back growing food, over in Europe.

01:18:50;29

And then, when I got back here, I had this burning desire to farm. And, but, you know, finding land, in our area, land's very expensive at that time. And, I couldn't really make a living, you know. I had three kids and, a wife and three kids. So, I started doing a little bit of farming. My wife's family had some land. And I started doing some farming there, a couple acres, and I had a corporate job.

01:19:22;02

And then, I just kept increasing, and I got up to a hundred acres. So, I had these two full-time jobs, and I left the

one corporate job and went to Proctor & Gamble in sales and sales technology. And, our office got closed down in Milwaukee and we had to go to Chicago, Oak Brook, Illinois, and [I] had to drive there a couple of days a week, which was a real pain 'cause of the traffic and in 1993, this was about 19, this was, '89.

01:19:54;19

And, in '93, I was driving down the street in Milwaukee, going to one of my Proctor accounts, and I saw this "For Sale" sign for this old greenhouse farm operation. And, I didn't know much about that side of town, or anything. And, I stopped and took down the number, and I was able to, to make a long story short, it was between me and a church, bidding for this property. And, the altar person at that time, a former priest and farm boy from Sheboygan, Wisconsin, at the presentation he said that, "You know, I really want this to stay as a farm. I've got too many churches in my district already."

01:20:37;07

So, you know, "What this guy's gonna do, describing to

me, is religion in itself." So, he helped me, in terms of, I was able to get a loan from a bank, which was kind of unusual too, to be able to purchase. I cashed in my retirement, got a loan. And, I took the big gamble, the risk, and, started this urban farm.

QUESTION:

01:21:02;08

Let's pause, just for a second.

QUESTION:

02:00:40;04

You know, let's talk a little bit about how you got Growing Power started and some of the innovative things you've done to sort of create a new kind of organization. This sounds a little different than we normally hear about. So, tell me how it got started and how some of the techniques, and how you get people in there, and keep 'em motivated and...

WILL ALLEN:

02:00:56;09

I, well, you know, when I bought this farm it was a real, you know, fixer upper, you know. It had glass missing in the greenhouses. We, when I first went in, I had to rehab a lot before I actually could do something with some of the

greenhouses. So we removed all the glass which was a tremendous job. It was thousands of pounds of glass that we took down, to put in this material called Polygal which is a waffle-like material made outta plastic that lasts about twenty-five years. And, you can put it up in sheets, you know, four-by-twenty-four foot sheets.

02:01:40;18

And, that's what we did, because the glass, it was costing me a lotta money to bring in a guy to go up on the roof. He would probably put in twenty-five, or so, panes and charge you fifty dollars an hour. So it was very expensive. And it was only one guy in the whole area to do that. So this just made sense to get rid of the glass and use this new material called Polygal. So that was the first thing that we did.

02:02:08;22

Then we got open, and I was running as a for-profit, not as a non-profit. I never had any plans to do, get involved [in] any non-profit kind of thing. I was taking my farm produce, my hundred acres of vegetables. I'm sellin' 'em

at this place and using the greenhouses to grow bedding plants that I would take back to the farm and sell. And that's basically what I was gonna do.

02:02:35;15

About two years into the project I sat on a board of a hunger-fighting organization called Hunger Task Force. And the director called me one day and asked me if I would help a youth group who wanted to grow an organic garden. And I was the president of our farmer's market, the largest farmer's market in town that was run by the farmers. And I said, "Yeah, I'll do it." Because in their plan they wanted to grow some organic vegetables and sell 'em at a, and wanted a stand to sell 'em at our farmer's market.

02:03:05;17

And, and I went over. They had, two eight-by-eight plots of land. So I went over and looked at the, met with 'em and looked at the land. And I said, "That's too small for you guys to really, grow enough to be able to sell." So I had this space that's now, in the back of our greenhouses,

now full of greenhouses but back then it was just a big open field. And it had never been used for growing before. The previous owners, these greenhouses go back to the late 1920s.

02:03:37;27

The previous owners just dumped all their plant material in the back. And it was real rich soil but very weedy. And there were some groundhogs, or woodchucks, or whatever you wanna call 'em, around the exterior of the garden, of the space. So I told the kids I would get it worked up.

02:03:57;05

And it was late June, kind of late to start a garden. And these kids would get bussed over three times a week. And we, I gave 'em plants. I gave 'em seed and showed 'em how to plant 'em. And they were starting to have some success. But the groundhogs would go in and wipe out half of their crops. So I'm sayin', "Ah, they're probably gonna quit."

02:04:20;11

And it was, the summer of, '95. And it was a very warm

summer. It was, like, a really, really warm summer. So I thought, "Oh, these kids are not gonna handle this." You know. But they kept coming back, you know. And, the crops that they grew were very successful because of the fertility of the soil. And they were able to go to the farmer's market.

02:04:43;13

And somebody had called our local paper, the *Milwaukee Journal Sentinel*. And they sent out a reporter and a camera person. And they did this big front-page article, they interviewed me and, some of the kids. And, after the article ran I started getting calls from non-profits, in the area, schools that wanted me to work with their kids. So I volunteered and started bringing school groups and other youth groups into the facility and volunteered for a couple years. And then my friend said, "Well, Will since you like this so much why don't you start a, a non-profit?" I said, "I don't know anything about non-profit business." You know. I come from a for-profit background. And he said, "Well, we'll do the administrative stuff." I said, "Only thing

I wanna do is work with the kids. And we'll farm, be a part of your first board."

02:05:40;23

So that's how I got sucked into, that's why I'm sitting here today, because of the kids that I worked with, that initial group that led to the article, that led to more groups wanting me to do. And then, along a continuum, I did start to get more interested in saying, you know, let me try this and that.

02:06:03;09

And we started doing aquaponics in three barrel configurations. Then we started doing vermicomposting, starting with thirty pounds of worms that I brought in from a worm farm in Florida. And the kids didn't do so well. So I started, they were doin' 'em in plastic bins. And then I switched to wooden boxes, a little bigger environment. And we started having success. And then I really got hooked on the worms.

02:06:34;00

I said, "These worms are pretty cool." You know, they're

multiplying and, you know, they're eating all this compost and food and turning it into this wonderful fertilizer. And, so I kind of studied that for five years and started composting. And it's just along a continuum I just kept increasing the volumes of everything.

02:06:58;09

I went from, say, ten worm boxes to two or three hundred. And then I started building these worm depositories outside, these huge worm depositories. And, you know, it just kept along this continuum. Then I started taking those three barrel configurations and digging trenches inside the greenhouse in areas that aren't normally used, and started doing this aquaponics which is a symbiotic relationship between the plants and the fish. The fish give off waste. The plants take the nitrogen out. And using vertical space and, started marketing some of the greens. Started growing greens, you know, year-round. Went from growing outside in the summertime to growing inside in the wintertime. So, this just keeps the season going there, for keeping the customers that I had.

02:07:52;08

Because I started long before I brought Growing Power marketing into the city. So I already had an infrastructure and customers already. But I didn't have those customers year-round. So the idea of keeping those customers and keeping income going year-round was pretty interesting to me.

QUESTION:

02:08:13;20

Tell me a little bit about, you say, "I started studying this. And with the kids we were doin' the things with the worms and the aquaponics." What was your method? Was it, like, a scientific method? Was it trial and error? Were you, I mean, how did you develop those things? And what kinda breakthroughs? I mean, tell me a little bit about that.

WILL ALLEN:

02:08:28;08

Yeah, my research was pretty much, I call it country research, you know. Kinda, kind of trial and error, kind of research. In terms of answering some key questions. What is the worms' favorite food? What is the best

temperature that they like to be in? What triggers more reproduction? And stuff like that.

02:08:52;29

So I started, you know, coming up with answers to those questions. 'Cause those are key questions in terms of scaling up, to be able to figure out what is the kind of food that they like. And just like microorganisms I found that they like simple sugars as their favorite food. So some of their favorite foods became bananas. Banana's probably their favorite food. Sweet potatoes, fruits, things like that. If you had lots of molasses. You can actually see the ground move when you put molasses on a worm bin. The amount of food to feed 'em. Found out that they eat their weight daily which is hard for us to wrap our minds around as humans that a worm can eat its' weight daily.

02:09:43;05

So if you have five pounds of worms you need five pounds of food for them everyday. If you have five thousand pounds of worms you need five thousand pounds of food a

day to feed 'em. So, they're really livestock. They're just like a chicken, or a pig, or a cow. You have to treat 'em as livestock and feed 'em. If you don't feed 'em they die, you know, or they migrate somewhere to find food.

02:10:11;26

They can only travel ten yards a year so they're not going far. They will always stay near their food source, in their food source, 'cause they have to eat to survive. They have to be in a situation where the soil is moist because they move through the soil and they shed predators, things like mites. If they're in dry soil the mites have an opportunity to latch on to their bodies. And mites will kill 'em. So you have to keep the soil moist.

02:10:42;27

They're parallel dwellers instead of vertical dwellers like a night crawler. You know, night crawlers are the big worms. The night crawlers you have to, they have to have hard pan clay to drill their holes down. They're important to an ecological system. But these red worms are small worms that travel horizontally through the soil.

QUESTION:

02:11:05;23

So, as you're doing this research you have a team of kids workin' with you, or other people?

WILL ALLEN:

02:11:09;09

No, I...

QUESTION:

02:11:09;27

Everybody feedin' together? How's that work?

WILL ALLEN:

02:11:11;22

Well, most of my research was just me doin' that research. And then once I reached a point, one day I just kind of like, a light bulb goes on that you say, "Well, I kinda got this thing. I understand it. I got it." You can give me a handful of worms, drop me off anywhere in the world, I can build you a system as big as you want. So I wanted to reach that point. I'm kind of obsessive that way.

02:11:39;16

But, so I reached that point and now it gave me the ability to pass on what I'd learned to other folks. That's when I started passing it on to the youth and other people that came into our space. And at the end of that point is the

time that I said, "Now I can start these trainings with all the other stuff that I already knew." Same thing with the fish. I had to study, tilapia. We started raising tilapia. You know, tilapia's a great starter fish for people to learn how to do aquaculture, because it's a fish that can withstand very harsh water conditions versus, say, a lake perch, a yellow perch that you find in Lake Michigan that has to have very high water quality to survive. So, that was kind of the training ground for me in aquaculture, is raising tilapia. And then, now we raise thousands of lake perch.

QUESTION:

02:12:39;01

One of the things you were looking for is [to] come up with simple methods even though it took a lotta work so people could grow their own food and have control over it as opposed to, you think of a big farming operation, all this mechanized stuff, satellites, fertilizers. Were you thinking that at the time?

WILL ALLEN:

02:12:52;23

Yeah, I...

QUESTION:

02:12:52;28

Simple ways to raise food?

WILL ALLEN:

02:12:54;11

Well I was looking at the, 'cause it's easy. You can go online or there's books on, you know, industrial kind of systems that cost thousands of dollars. And communities can't afford it. Not even middle income folks could afford those kinds of systems. So I was, every system that I was thinking about creating and everything I was gonna do was something that people could afford to do.

02:13:15;15

For example our systems are raising ten thousand fish. And a fish run costs about three thousand dollars. That same system would cost fifty thousand dollars if you had all the bells whistles of bead filters and takin' the water out, runnin' it through systems, getting rid of the waste and then bringing it back into the system. Where our systems, the same water is looping through the system. It becomes a water conservation system in that you don't add make-up water. It's the same water being cleansed

by the plants. And you have to find plants that'll take up the nitrogen.

02:13:55;13

And then you're able to harvest those plants, sell those plants. And then they grow back very quickly within a week like watercress. You harvest watercress. Within a week it looks like you never touched it. So therefore it can take up more waste. So, and you only have to add make-up water to that system maybe once a month.

02:14:15;16

So it became a very attractive kind of system for communities, not only here in the U.S. but around the world. Especially African countries that would come in and take tours, or workshops that they would take those systems back to their countries, or their farms, or their cities, or their organizations. So a lotta projects started to get born. Youth projects around the country, where people would come in and learn these systems and then take 'em back and, you know, build 'em. Sometimes they would build 'em a little bit different than ours, which is

what really makes me happy because I think none of this stuff is new technology. It was done some time in history. In ancient times people were using aquaponics.

02:15:07;28

In countries where, you know, you have waterfalls that they start digging ponds and the water comes outta the mountains and it goes from this pond, to this pond, to this pond and then down into the valley, where they're raising fish. So, there's so many different ways of doin'...

QUESTION:

02:15:49;11

Let's talk about that, the importance of scale Let's talk a little bit about the ability the, these techniques that, you're coming up with that make them larger so, like, more people can increase the scalability factor, importance of that in your plan.

WILL ALLEN:

02:15:59;13

Yeah, again I wanna make it really clear that I really didn't have a plan. It was more of an evolutionary thing that was just kind of a natural, spiritual kind of revolutionary process. I really didn't say, "Well, I'm gonna sit down and

design how this thing is gonna be." What I did is, I do this kind of visioning, that I don't even put on paper. It's just kind of in my head. I look at the present, maybe five years from now, ten years from now and then try to make it happen. So that's kinda the way it was happening.

02:16:39;09

Because, I had to do so much physical kinda work. I didn't have time to put stuff on paper because I was always, I'm working' seventeen hours a day, seven days a week, you know, for years and, you know, you don't have to time to put stuff... So it's all in my head for a bunch of years. It's not all in my head now. It's out on paper. But it was, at that point in time it was all in my head. So all that visioning was happening. And the planning was really happening, but it was more internal planning within me. I wasn't planning with a whole bunch of people. I'm just sayin', "Lemme try this. Lemme try that and, you know, see if it works," kind of thing.

02:17:25;03

But I realized that we had to scale up for survival because

once we became a non-profit, nobody would give us grants. And what happened was, I said, well, nobody, you know, these friends of mine who were writing grants, they weren't successful. I said, just start, let's start makin' money. Let's start selling products and services which really bodes well for us now because we have over thirty income streams coming into Growing Power. And over, well over fifty percent of our income comes from our own efforts of selling products and services. And that's what makes us sustainable in terms of our employees and so forth that they have permanent jobs where a lotta non-profits are so grant-heavy that if they don't get a grant they gotta lay somebody off.

QUESTION:

02:18:22;05

So you do a lot of it on your own. You're self-sufficient.

WILL ALLEN:

02:18:24;09

So I realized that we had to scale this thing up if we're gonna make money. So that's kinda what we did. I started, one of my strengths I think is building relationships with people. So I started building, you know,

going back in my sales days 'cause, you know, I had that skill of once you work for Procter & Gamble you, they're the foremost trainers of salespeople in the world. You learn how to sell. But I always knew how to sell.

02:18:52;28

And the product sells itself, of course, if you're growing, vegetables and so forth. So, I said, "Let's sell some more product." And that enabled me to hire more people along a continuum. That's what kept happening. I kept coming up on more income streams and started doin' fee for service. We started doing trainings where we charged for the trainings.

02:19:16;01

And so I tried to come up with all these little profit centers. They could be individual businesses like the aquaponics. Growing fish could be a business. Growing sprouts could be a business. We had bees. Selling honey could be a business. Composting could be a business. So within this structure that we're starting to develop all these individual little businesses, could become, you know, individual

projects could become businesses.

02:19:45;11

But they were all housed within the non-profit, you know. But I tried to make sure that every one of 'em was profitable. So, on this side of the street of the non-profit I had these income streams. And on this side I had our social responsible stuff of training youth and doing all these social[ly] responsible things. So this side of the street was being able to fund this side of the street.

02:20:14;10

So with, hopefully, money left over, just like a for-profit company to be cash strong, to be able to go into the next year 'cause as a non-profit, most non-profits would be very happy to break even. So, my goal was to start developing a reserve fund similar to what many organizations do, have endowments or whatever. But usually those endowments come from a big gift whereas ours was coming from our own efforts of selling products and services which is a lot different. So I just kept growing that stuff to today and kept adding employees.

So today we have sixty employees, fifteen farms. We got thirty or more income streams. I'm always lookin' for new income streams and developing new income streams.

QUESTION:

02:21:12;05

I'm sorry. So you, tell me about the employees and the income streams again.

WILL ALLEN:

02:21:15;05

Well, you know, that was, that became, one of my goals is to develop more income streams as we moved along that continuum. Once we got into the, you know, 2003, our budget was, like, three hundred thousand dollars. And every year our budget just kept going up. And now today we're 4.1 million. This year we ended with 4.1 million. Last couple years we've been very profitable in terms of being able to end the year with a surplus to be able to go into our reserve, or endowment, or whatever you wanna call it.

QUESTION:

02:21:51;23

Now what about your employees? When you would, when you go out to hire people do you look for a certain kind?

Did they..., just 'cause there's sort of a social justice element to what you're doin' as well as a business. Tell me about how you attract the people and, and what kinda people you look for.

WILL ALLEN:

02:22:02;24

Well I, it's kind of a mixed bag. Because we hire employees, couple [of] different ways. We have our youth core. I've been doing this long enough that a lot of our kids have gone on to college, come back. And we hire. We have intern programs where we have ten interns every, call it every quarter. So when they finish their internship if we find a couple that are really outstanding. And they can come in all age groups.

02:22:37;05

We have older interns, to kids just gettin' outta college or still in college. Then we put 'em into a ..., those internships are three months. Then if we find that three or four of 'em are really good we offer them an apprenticeship which is six months. Gives us a longer look at 'em to see if they really can hang in there and do the

work. 'Cause the work is very challenging physically that they have to do. And, you know, you gotta be smart. So we get a better look at 'em, over a six month period. And then if they pass that test then we hire 'em on to our regular staff. So that's how it works with that.

02:23:21;04

We also are able to pick up some folks through volunteers. We are the number one volunteer place in the Milwaukee area. Matter of fact, we have more volunteers than all the museums and all the others combined. So we get a tremendous amount of folks that come in to volunteer and some of 'em come so often they become almost like staff. So out of that group, we've been able to hire some folks out of that group.

02:23:55;13

And then, because I've been in this business a long time and we're really starting to scale up, I was able to hire a couple farmers that had lost their farms but had the ability to do some of the things that I needed like composting and, you know, upscaling our farming techniques because

they had experience. And they fit the model that I needed in terms of being able to work with diverse clientele.

Because if you're not able to work with diverse clientele then you can't work for us because that's what we are.

We are a multicultural organization. So you gotta be able to work with all cultures. That's one of the things that you have to do have to do, so.

QUESTION:

02:24:39;18

What do you do as far as, like, a typical day? Do you go in and rally the troops up? Do you act like a coach? Do you have to keep them motivated or, is more, everybody knows what to do or how does that work?

WILL ALLEN:

02:24:49;15

Well, you know, I still train a lot of, training is an ongoing piece. You know there are some things on the farm that I only do. For example, seeding, we fill these pots. We have 25,000 pots that are hanging because we do vertical farming using, like, this building. See how you have stuff hanging vertically here. This is how we grow food. As using every bit of space possible. I do all the seeding

because it's very intensive. Sometimes in one little pot like this there's 500 seeds in a pot. So, the seed's very expensive. So you can, like, buy a pound of seed. It costs \$150.00. You know, a very small seed.

02:25:36;18

So if I just handed that to you and say, "Go and seed some of these pots." You might dump \$150.00 into five pots, you know. So, some of these things I only do because it takes years of experience to learn how to do some of this stuff. So, now I've transitioned some folks to be able to do it now, but it takes a long time to learn how to seed those pots like we seed 'em which is broadcast seeding we use.

02:26:04;15

We don't use equipment to seed. It's all done by hand. So, and, you know, it also has to be done, you have to understand when things need to be seeded. Some things get cut and we seed a pot and it gets shaved 15 weeks in a row to get to that \$5.00 a square foot production level that I need to be at to make a profit, which equates to

\$200,000 an acre of production. If you're able to grow, that's 40-something thousand square feet in a acre. And if you're able to grow at \$5.00 a square foot you gross \$200,000. That's where I have to be.

02:26:47;22

So to be able to do that you have to be able to sometimes recognize whether you have to, after 15 cuttings take out that crop, reseed it really quick, cover it with worm castings for fertility, and move on. So in a given day, I might have to go in and seed 1,000 pots which probably would take a staff person two or three days to do it. And I can do it in an hour. So some things I do, like that. I maintain that piece. And other people, there's so much stuff to do on the farm. There's enough for everybody to do.

02:27:28;05

But some of the things, watering in most greenhouse operations, the person that waters is the owner of the business because watering, if you don't need to water and you water you can kill your plants. So it's a very skilled

thing to be able to water. So you don't want just anybody watering. You wanna say, "Hey you go and water." Next day, "You go and water." You know, so you have to really train somebody to do that kind of skill. So there are some, several things on the farm that only the principle farmer actually does. Now when I got down with my knee it kind of forced me to quickly train somebody to do the seeding, you know. But, it was a learning process for, in terms,...

WILL ALLEN:

02:28:18;08

But there's the hope that if I came and you trained me that I could go off to my city and duplicate what I've learned. I mean, so how do I learn that if there's so, only certain, how do I become a farmer? Do you train to that degree?

WILL ALLEN:

02:28:31;01

Well, when people come they learn the basics. And they still have to go back and practice that art. Because farming is an art just like anything else. So I never give 'em that false impression that they're gonna go back and be as efficient as me. But there are some things, basic

things that they can start with. For example, growing sprouts which probably is one of the easiest things to do. You turn over those trays of sprouts in one week. And you know, you can grow those because the seed is easy to seed in a flat, you know, you cover that flat with another flat. And then it grows.

02:29:11;27

In three days those seeds come up and start pushing that flat up. And you remove it, put it in the sun. Four days later you're harvesting that, you know. So those are kinds of things we try to start people with, easier things to do, that are profitable kinds of things versus something that's very difficult, like trying to grow rosemary or something like that, that's very difficult to grow or different types of crops.

02:29:42;05

So, when they come to the workshops they are able to go back and build [an] infrastructure like aquaponic systems, things like that. Because during the training they actually build a system and learn how to build a system. We teach

them how to do compost using the layers of carbon and nitrogen in a 4 x 4 configuration so they can go back home and build a 4 x 4 palette configuration and replicate that pretty easily.

02:30:10;04

We teach them how to build, you know, not how to build a worm bin 'cause anybody can build a worm bin. I don't waste my time teaching people how to build a box. We explain to 'em. We give 'em some drawings how to do it. But how to start the worm bin and how to maintain that worm bin over four months so that they have a finished product that's worth a lot of money.

02:30:35;23

For example if they build a box that's 4 by 4, using 2 by 12s, 24 deep by 3 feet wide by 4 feet long that'll hold 800 pounds of compost. 800 pounds of worm castings, let's say, with the debris as it goes through the sifting device you lose 100 pounds. So you got 700 pounds of finished worm castings at \$4.00 a pound. For a product that started out as a waste product that's pretty good money,

you know.

QUESTION:

03:00:48;24

You were here talking about Carver and some of the things he did. One thing is he thought you could use science to promote social justice and some social issues. I'm feeling that you have a sense that what you're doing is more than just growing food. There's a social aspect. Tell me about if you relate to Carver or if he was an inspiration or how that might...

WILL ALLEN:

03:01:07;00

Oh, yeah, the work that we do is really about social justice. When I mentioned the red lining of communities, to dismantle racism in the food system is a big part of our work. We operate an organization called Growing Food and Justice that's housed in Growing Power. And we have almost 1,000 organizations and people that belong.

03:01:29;28

We have an annual conference in Milwaukee every year to train community folks how to dismantle racism in their local communities. We bring in consultants to do

workshops to teach techniques of how-to, if they have a problem, like, the grocery store has pulled out and the reason that the grocery store pulled out is 'cause the owner didn't want to deal with a certain ethnic group or whatever.

03:01:59;06

How do you get a new grocery store in? How do you rally the folks in a community in a multi-cultural way because dismantling racism can't be done by one group, so it's gotta be done in a very multi-cultural kind of way. So, our trainings and our conference every year is very multi-cultural. And it's very painful kind of work that people have to go through, to really, you know, start working together, you know. So it's very interesting work that we're doing in that respect.

03:02:40;08

And one of the powerful things about this work is to be able to have projects like here, for example, in Detroit. One of the best things that could ever happen is the different groups from different areas of the city come

together around each other's projects and help each other. And that's what I try to promote when I come here is to try to have these regional trainings where we invite people from all these different organizations to participate in the training that we're doing.

QUESTION:

03:03:11;00

You know, you talked about growing up on a farm. How's farming really changed from the past to the way it is today? I mean now it's a big business, but tell me a little bit about your take on that.

WILL ALLEN:

03:03:19;08

Well, I think, when I was growing up and many people my age, you know, I'm in my early 60s, so when I grew up, you know, it was more people growing their own food. There were smaller farms. Today, I mean there were 200-acre farms. Today, we're talkin' 20,000-acre farms.

03:03:43;15

We've gone from, we've lost, in my lifetime, over two million farmers in America. So, that's the big change from many small farms to just a few very large farms that grow

our food. And we're very, very dependent on about five states for our fresh fruits and vegetables you know, in America, so, for most of the food that we get, or outside of the country. So, that's the big change.

03:04:17;25

The other big change is that the age of farmers, the age of these rural farmers is over 60 years old, whereas the new farmers that we're talking about, the urban farmer is under 40 years of age. So that's the other kind of exciting news . And many of those farmers don't come from farm backgrounds. They weren't daughters and sons of farmers.

03:04:45;15

And most of those farmers are female. Most of the people that are working in the food security movement or revolution as I call it are female, about 80 percent. Most of the farmers in the world are women. You know, contrary to what people think, most of farmers in the world are women.

03:05:08;27

So, you know, and that's important because it's always been that way. Women have always been the ones that have grown the gardens and the men went out in the forest to hunt for the animals and come back empty-handed, but the people still gotta eat, you know. So it's always been that way, I think.

QUESTION:

03:05:30;17

Yeah, you call it urban farming, but these techniques, wouldn't people in the suburbs like to eat this food? Isn't this fresher and is it better? Is it more nutritious? Is there an angle to that at all or is it...?

WILL ALLEN:

03:05:41;29

Well, yeah, of course, because if you trace, which I have, food that starts in the Salinas Valley, by the time it gets into your belly sometimes it's 14 days later because on the day it gets picked, it goes and sits in the field. The weather there is, you know, it's cool at night.

03:06:01;27

It starts warming up during the day. They harvest all day. When you get in the afternoon, the winds come up and it

starts getting cooler. The product stays in the field, it gets brought-in in the evening, goes into processing, goes into a warehouse, waits for a broker to call.

03:06:18;23

It's loaded onto a 53-foot refrigerated truck and it heads toward New York City. It gets there three days later. Now we're talking sometimes six days. It might have set in the coolers out in California for three days, maybe four. It's now seven days old.

03:06:36;03

It goes into the wholesale house in that city. The wholesaler gets a call from the grocery store. They deliver it to the grocery store. It goes to the grocery store cooler. From there it goes out onto the shelf and you unsuspecting customers come in there and they got the nice, pretty lights and misters and you pick up your green beans and carrots or whatever you get, celery, and you take it home, you put it in your refrigerator.

03:07:01;24

Are you gonna eat it that same night? Most people are

not. So we're talking 14 days. Meanwhile, in the local food system or if you grow it in your backyard you're getting it into your belly within a day and a half.

QUESTION:

03:07:16;29

And doesn't it all come...

WILL ALLEN:

03:07:17;17

That's the difference. And the nutrients start leaving the product as soon as it comes off the vine. So a lot of times it's 50 percent less nutrient in the first scenario I gave you when it's shipped from Salinas Valley into your kitchen.

QUESTION:

03:07:37;09

And you're seeming to tell me that with these techniques, compost, etcetera, the worms, that we can have soil that's just as good as what they grow? Or we're led to believe you gotta grow stuff out there.

WILL ALLEN:

03:07:47;01

Well, I'm telling you that the local, if you do it right and the way that we're doin' it, the food is gonna be more nutritious because the soil quality is much better than what they're growing because they're growing the same

soil, that even if it's organic, they're growing it in the same system, using a poor quality of water to grow that food, you know. And the shipping and the change of temperature from cooler to cooler depletes the product of its nutritional value.

QUESTION:

03:08:19;21

So you say what you're doing is really is a system that people can learn? Is a system sort of the right word?

WILL ALLEN:

03:08:24;04

Yeah, it really is a system. It's a system that can be tweaked to work regardless of where you are, but it's a system that takes you from, you know, growing the soil, well, really it takes you further back than that.

03:08:43;08

It takes you to developing the relationships to get the inputs, the waste, you still have to develop those relationships for people to give you the waste and then you have to do something with that waste. You gotta turn that into a product. And then you grow in that product called compost.

03:09:02;21

And then you take care of those crops during that period. And then you harvest that product. Then you process that product. The system is similar to the industrial system, but it's local and there are jobs all along the way. There's jobs for the person that goes out and does the selling, the outreach, marketing piece. There's truckers involved, there's composters involved, there's growers involved, there's more sales people involved to sell it to stores, you know, that's a bunch of different jobs along the way.

QUESTION:

03:09:43;13

And what's standing in the way of more of us doing this? Is our farm policies..., like, against this? Or is this an idea that's time has come? Or what's your take on it?

WILL ALLEN:

03:09:51;21

I think funding is the big issue. Industrial farmers have the ability to have commodity payments. Small farmers like me, we don't have that luxury, when we have a bad year, to be able to have supports. Nobody even talks about that in our world. We don't want supports, I don't

think.

03:10:15;14

We would like, just like any other business, to have access to funding, to banks. Many banks will not, if you go into a bank today and say, "I'm gonna start a urban farm," well, the security's gonna come and they're gonna throw you out the back door or the front door or whatever door they can find, the closest door.

03:10:35;03

So the point I'm trying to make is that it's not something that's easy to sell to a bank. It's not something easily to sell to even the USDA who backs up some of the bank loans through their loan programs and so forth. So what we've been able to do in Milwaukee that takes a long time --and I wouldn't want anybody to do this--is to go through this continuum of proving yourself to the point that, you know, you're looked at as an asset.

03:11:10;06

To the point that, you know, right now I can go to a bank and get a loan because of what we've accomplished. But

not everybody's gonna be able to do that. And I shouldn't be the model for that because I'm starting a new project right now and we went to a bank and we're probably gonna get funded for this huge project. You know, \$1 million worth of funding from a bank, which is unheard of for a urban gardening project.

QUESTION:

03:11:42;04

What would an average urban gardener have to do, I mean just how much land do you need to get started and make a difference in your family or...

WILL ALLEN:

03:11:48;11

Well the nice thing about urban farming, you can start on a very small piece of land, a backyard even, 1/4 acre, 1/8 of an acre because there are so many vacant lots, you know, that might be your first garden. And then you add more vacant space until you have more, you scale up.

03:12:08;01

But I always tell people start small and work your way up. Don't try to go in and try to do too much at the beginning if you're not ready for it. Don't try to, my rule is, you

know, when it comes to this work, especially if you're gonna sell your product.

03:12:27;13

Never sell product that you can't repeat that performance at least 52 weeks of the year. So if you have a restaurant and you want arugula and you call me and you say, "Well, I heard your arugula's good, right. I want five pounds." So I go and whack off five pounds, shave five pounds of arugula, put it in a nice bag, deliver it to you.

03:12:59;13

You pay me my, you know, \$10 a pound. I got \$50. You know, and then you call me back five days later and say, "Can you bring me five pounds of arugula?" if I don't have five pounds of arugula, what are you gonna do? You're gonna go back to the wholesaler.

03:13:19;24

So the rule is with these urban farmers if you get a customer, remember who your competition is. You gotta repeat that performance 365 days of the year, you know. So don't over commit yourself. Don't tell people stuff you

can't do. Always over produce. Those are some of the rules that I had.

QUESTION:

03:13:40;17

And what about it's also a family business. Your daughter's running a similar thing in Chicago. Tell me does she tell you what to do 'cause she's the female farmer and you're just a guy? Or how's that work?

WILL ALLEN:

03:13:50;13

No, she don't tell me what to do. No, she actually is an artist. She went to school at the Art Institute in Chicago and she got a Master's in art therapy. But in 2000, I did a workshop, well, actually I made a presentation at a conference in Chicago and she was there. Her organization that she was working with.

03:14:16;19

And one of the things she realized is that food was missing from her program. And she asked me if she could get something started in Chicago. And I said, "Yeah, go ahead. Give it a try, you know." And so she actually orchestrated the grant, part of the project that I showed

today, and all the projects that we have in Chicago, along a continuum again. So this is our tenth year of doing projects in Chicago.

QUESTION:

03:14:49;24

Can you now go around the country though and find where you've trained some people and they've started to catch on and build some critical mass? Or is that...

WILL ALLEN:

03:14:57;13

Oh, yeah.

QUESTION:

03:14:58;06

Tell me a little bit about that. Have you visited these places that you've sort of; another kind of seed you've planted?

WILL ALLEN:

03:15:02;17

Yeah, well, we have 12 regional training centers around the U.S. in places like Louisville, Kentucky and Minnesota. We have one in Mississippi and Arkansas. We have one in Virginia. We have two in North Carolina.

03:15:25;16

So these evolve out of folks coming to our workshops and

then coming to our commercial urban AG training program where they come for five months and then they graduate and then they start a commercial business. And then we sign them to a five-year contract where we guarantee we'll come to their place and do a regional training at their place to help them build infrastructure and train people from their regional area.

03:15:53;10

So that's one way that we spread the word and spread the work around the country. But we've doing this for over ten years now, these trainings. And we're seeing farms pop up all over the country. There were people here today in the audience that went through program that have started a farm.

03:16:17;16

Everywhere I go now, I run into somebody that started a farm. We're doing an evaluation process now, going back to a lot of the stuff I talked to you about, the paperwork stuff that was in my head, all the stuff that was in my head and all the stuff that we didn't do early on, we're going

back and doing surveys to find out all the people we've trained.

03:16:37;22

Where are they today? What are they doing? We know a lot of 'em because we continue to work with 'em, but there have been thousands that have come to our workshops and our conferences and so forth. How have we affected them? So we're starting to do that evaluation. I actually hired an evaluator, trained the evaluator, so we can get some very objective evaluations so we can get better at what we do.

03:17:03;12

But really to find out how effective have we been? How effective is our trainings? You know, we're starting to train universities to learn how they can work with the community. We're working with the University of Wisconsin on a very large grant to really train them how to come into communities and basically behave.

03:17:28;19

How do they get what they want in a respectful way

instead of just coming in and sucking the wind out of communities and going back and getting what they want and leaving the community still struggling?

QUESTION:

03:17:42;13

Do you sense that what you're doing is, as I rearrange my chair and squeak, is innovative and it's really something that might change the way the world works? And what's your take on that or are you just going along and singin' a song, tryin' to make it work? I mean how big is your vision?

WILL ALLEN:

03:17:58;14

Oh, the vision is big because my goal is that every human should have access to healthy, safe, affordable food. That's a lofty goal, but I don't think we do it in the way that we've tried to do it in terms of the industrial food system and growing soybeans and corn and processed foods that are not good for us.

03:18:18;11

I think it has to be done on a local level. That's gonna take... probably in this country to fundamentally change

the food system. It's been estimated that we need 50 million people growing food that are currently not growing food. You know, fundamentally change the current conditions of agriculture.

03:18:40;06

That's not gonna happen probably in my lifetime or yours, but it's something that we should be shooting for. We should be shooting for things like dismantling emergency food systems. That should be our goal: not build institutions for emergency food but to just have minimal amount.

03:19:01;05

Right now emergency food systems are very large institutions that are starting to even grow more. So the only way we're gonna dismantle those is to make sure that people have access to healthy food and we people, communities start controlling their own food systems and it's done in a local way that creates jobs.

03:19:23;11

Because this is a great opportunity for us to create jobs.

And one person, when I was in Vancouver, said, "Well, if you create jobs, won't it hurt the industrial [agriculture]?" I said, you know, that was a hard question for me to answer. I was like, "Hey, they're not creating jobs. They're getting rid of jobs. They're doing stuff with machinery and we're not hurting them, you know."

03:19:50;21

"We're not gonna get rid of the industrial food system any time soon. We're talking about five, ten-percent increase in local food which would be monumental in terms of five percent more food, five percent more jobs, ten percent more jobs, ten percent less environmental impact of shipping food, you know, from coast to coast or further away, flying it in from foreign countries and so forth."

QUESTION:

03:20:18;15

And you say you've been doin' this for ten years, but you've really been farming all your life.

WILL ALLEN:

03:20:22;05

Yeah.

QUESTION:

03:20:22;07

And what keeps...?

WILL ALLEN:

03:20:23;05

Well, when I said ten years, I meant we've been doing the trainings for ten years, but we've really been involved in the urban AG since I bought this farm. For 18 years I've been involved in the urban AG. But as a rural farmer, I've been farming in Wisconsin for 34 years and, you know, from my youth, you know, I started doin' the numbers and I said, well, I've been growing food for about 50 years.

QUESTION:

03:20:49;16

Well, what is it that keeps you passionate about advancing this vision? Don't you ever get up some days and go, "Well, let the next generation..." I mean are you still driven every day? And do you know what's makin' you feel that way?

WILL ALLEN:

03:21:00;06

Yeah, because I like challenges. This is the greatest challenge of my life. I mean becoming a professional athlete was a big challenge, but this is a much bigger

challenge, this is much harder than becoming a professional athlete.

03:21:16;21

This is a huge challenge. To be able to see a community change. I've seen our community change. I've seen people get inspired. I think that is what drives me every day. To see the young people now come on board that I can pass on stuff that I've learned to them because they're so interested in learning what we're doing and wanting to get involved.

03:21:46;08

So I think that's what, you know, stokes me every day to keep goin' because this is very challenging physically, you know, and mentally challenging work. And the fact that we're increasing the, you know, farmers in this country. [Farmers] have always been kind of looked at down-on-the-low, way down here, versus other professions.

03:22:13;13

Now, I'm starting to see that farmers are being looked at differently because if you go to Europe or Israel or other

countries, farmers are put on a pedestal. They're up there with doctors and I mean they're looked at that way, but in this country it's never been that way.

03:22:30;14

But now I'm starting to see that change because food is starting to become an important thing. The people are talkin' about wanting to eat better, understand that eating poor food is a detrimental thing. Eating processed foods is pretty detrimental for many folks, many groups that can't metabolize certain types of foods and so forth.

QUESTION:

03:22:55;01

And of all the things you've done over the last, you know, years working on this, to helping people, what's something that you're most proud of? Can you isolate it down to one or two things that you said, "Man, I really did that well"?

WILL ALLEN:

03:23:09;17

Oh, gosh. I guess inspiring young people to get involved in this work to be an inspiration to them, to be able to say, you know, when people come up to me and say, young people say, "You inspired me to get involved in this work."

So I think that, for me, that's probably the...

QUESTION:

03:23:32;19

And let's pretend we had a bunch of young people here. What would you say to them about their future? I mean they're gonna inherit the earth, so to speak. I mean what would be your advice to help them be more successful, maybe help their communities?

WILL ALLEN:

03:23:44;17

Well, I always tell them that I have a responsibility to pass on what I know to you guys and you have a responsibility to meet me halfway and try to learn some of the stuff respectfully. And you have a responsibility of executing that. And you also have a responsibility of passing that on to the next group.

03:24:06;09

So, if we can get some of 'em to really think about that, I think that that's important because that's the way this has to go. We have to be able to pass on what we've learned to the next generation and have them... I think we had a couple of breaks there where we stopped passing on stuff.

03:24:27;17

And I think we're back now with the economic turn, a lot of times when the economy goes south, it changes the way people behave. And young people seem to get it even more so than older people. So I think we have a great, a rare opportunity to really get them to think about the future.

03:24:47;29

And they are. They're thinking differently. Like I said earlier, instead of going to corporate companies, they want to know what a sustainable practice is. They want to know, I want to do something that's really important versus something that makes me lots of money 'cause they see the misery of their parents maybe in terms of not enjoying their work.

03:25:08;07

I enjoy my work. Not everybody enjoys their work. I don't even consider it work anymore. It's not work, you know, so that really worked for me. And I think if young people kind of look at what they do as not really a laborish

job that they gotta do, you know, they hate going to, you know, their quality of life is not as good. But I think young people are really smart today and they want to do the important work.

QUESTION:

03:25:41;05

Well, what do you think if you had a choice of how people would think about you, you know, long after we're gone as the old saying is, what would you like them to think about what you did and what you stood for?

WILL ALLEN:

03:25:53;28

Yeah, I think it goes back to what I just said, just a person who learned some stuff and passed it on, you know. That would be enough, you know.

QUESTION:

03:26:07;05

That'd be pretty nice if that happened for all of us, wouldn't it, yeah?

WILL ALLEN:

03:26:09;04

Yeah.

QUESTION:

04:00:38;23

I want to go back. You were here today talking at the

Carver exhibit and I had kind of asked you if he was an inspiration or you saw any parallels, 'cause you'd studied him. Just tell me a little bit about what you think of him and what he did. It doesn't compare to what you're doing...

WILL ALLEN:

04:00:51;07

Well, I think George Washington Carver was definitely a genius and an innovator of his time, far beyond what most people even know, far beyond this exhibit, because there were some things that he developed that were co-opted by others. For example, almost every implement that you use today in farming, he invented. And a lot of people don't know that. A lot of the digging equipment that large scale farmers use on their equipment, he invented that stuff.

04:01:28;29

He was also a soil scientist, so some of his writings would rival anything that you would read today. It would even be more insightful than some of the stuff that you could find today on the Internet or whatever, from soil scientists

today. So he was way beyond his, he was like, you know, I would say that he could operate, he could step, if he could come back today, he would be way out there. You know, people would still be learning from him. That's how important he was. And just the fact that he was working in a time of segregation, in a time of great struggle, in a time of, you know, as an African-American. He was, you know, wasn't accepted in everywhere in this country. So.

QUESTION:

04:02:34;11

You consider him an inspiration or...

WILL ALLEN:

04:02:36;08

Oh yeah, he's been a great inspiration for me. He's one of my heroes and a legacy that lives on today in terms of, you know, the work that I do is just, for me, he passed on stuff that I'm just passing onto other folks, so. And I think that's the way it should be.

QUESTION:

04:02:59;18

When you think about all these things you've done, do you consider yourself to be an innovator?

WILL ALLEN:

04:03:07;00

I think some of the things that I've done are probably innovative in terms of the way that I think am kind of a systems thinkers, in terms of developing, if you have one thing, it's like a puzzle. If you have, I call it a food system puzzle. If you have this big puzzle with all these different things, pieces of the puzzle, and things that you're currently doing. But you're always adding a piece of the puzzle to make some of the things work better. So you always have to be thinking on how to improve what you're doing. That's what I'm always doing. How do I improve my aquaponic systems to make them, without spending a lot of money, going really high tech, gives any kind of cookie cutter approach. But how I can improve the system? How can I, for example, capture water? How can I use the earth to heat?

04:04:07;14

Like one of the things I'm doing now is I'm dropping this thousand gallon drum and I'm covering that drum with what we call hot mix, which is hot compost. And I'm filling

with water, so I got 150 degree temperature around this barrel, heating the barrel. And then I'm pumping water out of there into a fish system, circulating the water back and forth to heat the fish system.

04:04:36;15

I guess we're using a little bit of fossil fuel in that we need electricity to operate the pump. But you're not using a lot of energy to heat the water. The compost is heating the water. Things like that. Simple kinds of things. And then you can, if that works, then you can do a bigger, instead of a thousand gallons, let's do 25,000 gallons, you know.

QUESTION:

04:05:00;18

Sounds to me like you're intensely curious.

WILL ALLEN:

04:05:03;15

Yeah, yeah. You have to be curious to, you know, when I think through these things, how can we do these systems, you know, it's like I wonder if you could try this. I wonder if this'll work. If it works, it's great. If it doesn't work, try something different. So that I have that ability to do that, because you know, I own the land. I'm the CEO. I'm the

farmer. I'm the, you know, I can experiment without having to go to anybody and say, "Can I do this? Can I try this?"

QUESTION:

04:05:37;18

But when you try these things, I mean, you're not always successful. It fails from time to time. What do you do when something doesn't work? Do you get discouraged? Or what's your attitude about that?

WILL ALLEN:

04:05:44;28

No, because there are so many things that don't, you don't get discouraged. You just try something different or tweak something to make it work. You know, and a lot of things, I don't know how to actually do some of the mechanics of things that I conceptually come up with. So I got to have people that know, you know, how to pipe certain things. You know, they might have no idea what I'm doing. But at least they know how to put the pipes together or get the right kind of pump. You know, that kind of stuff I don't know.

04:06:18;25

So you got to have other people that have some skill sets to be able to assist you in your conceptual ideas, you know, 'cause the older I get, the less, you know, physically attached to the projects. I may come up with this concept and I tell people how to go do it. This is what I want you to try to do. So they become a part of the project. They get, a lot of times, they'll get the credit for the project. But it might be my conceptual idea. That happens all the time now.

QUESTION:

04:06:53;04

More of the ideas coming from, you're take, people said they take a shower. They take...

WILL ALLEN:

04:06:57;28

I don't know. I'll just wake up some mornings and be eating breakfast. And some idea'll come to me, probably driving down the street. And you know, on the way to work and something'll come to me. I've forgotten more things than I've actually, and then they come back to me.

04:07:14;27

You know, have you ever done that? When you're driving,

you forget some idea. And then you forget about it for weeks. And then, all of a sudden, it comes back to you. That's what happens to me all the time. I say to myself, "I wish I had that recorder. Then I could..." Then I say, "I don't really want to record it, 'cause you know, I'm already doing so many things."

QUESTION:

04:07:35;23

There's always this thing about people who are inventive and innovative and that they're doing something else. And there's this great moment where they made a discovery. Is there anything like that in your training that you can tell us about?

WILL ALLEN:

04:07:48;21

Well, I don't know if I can say that. I just come up with these ideas, like I said, these conceptual ideas. And I can see how they start. I can see the whole path of how it's gonna evolve. I can say I do have that kind of way of thinking. I can see how like with this rain catchment system. I had that whole thing figured out. And my staff thought I was crazy when I said, "We're gonna capture all

the water into this system and then we're gonna use this system as a fish system. And we're gonna pump that water back inside, into a fish system inside, re-circulate that water and grow lake perch. The water will always be able to circulate because once it goes inside, it gets heated a little bit from the ambient temperature. Then it goes back and outside, where it's, you know, could get below zero temperature. But the system will never freeze. And then agriculturalists'll say, "Well, you can't grow those fish, because you don't have enough depth of water," but four feet of water was enough depth, if you kept the water circulating and kept the water at a certain temperature. The fish don't know whether they're in 50 feet of water or four feet of water, as long as the water temperature is enough to sustain them.

QUESTION:

04:09:21;27

You know, you were recently in Detroit. Or what was it, in October?

WILL ALLEN:

04:09:25;13

Yes.

QUESTION:

04:09:26;00

When you took these pics, I'm gonna hand you each one of these pictures. If you can just tell us a little bit about, you know, what the picture represents in your memories of that. Maybe just hold each one so the camera will see it. We don't need, you know, just a couple hours on each one would be fine.

WILL ALLEN:

04:09:44;01

Okay, this picture is, you know, this is done by the organization, so I guess I can take a guess at what it means. It just denotes the name of their farm, D-Town Farm. And it's a decorative bench with pictures of vegetables. So it's...

QUESTION:

04:10:03;00

But you were training people. I mean, what was...

WILL ALLEN:

04:10:05;11

Yeah, this is one of our regional training centers. They've been to Growing Power to get training. This is our second trip up to Detroit, at this point, to work with them. They invited people from the regional area to get training,

charged a fee so that they could pay our fee. But we got a grant from Kellogg to be able to work with them on this project also.

QUESTION:

04:10:36;24

Show us that and tell us what's going on there.

WILL ALLEN:

04:10:38;20

Okay, this is a compost system, where they're composting their garden waste. And it's decoratively, with the colors of, you know, African-American colors, I guess, the bright colors here. And it represents their cultural, kind of a cultural garden, an African-American cultural garden.

QUESTION:

04:11:09;29

And you taught 'em some of your techniques for this compost?

WILL ALLEN:

04:11:12;02

Yeah, they'd been to our workshops in Milwaukee to learn how to compost.

QUESTION:

04:11:19;07

And this is kind of interesting, obviously. This is a bunch of old hula hoops left over from the '50s.

WILL ALLEN:

04:11:28;13

Not quite. This is galvanized steel. This greenhouse actually came from some Kellogg funding that they received to buy two greenhouses. When we got there all the pipe was for the two greenhouse, hoop houses was all together. And they're two different types of hoop houses, so we had to first separate all the pipes so it would make some sense and try to figure what pipe went with what hoop house. So that's why it's laying on the ground like this. And eventually, we got that done and we started putting up this hoop house.

QUESTION:

04:12:14;29

So you trained him on how to build a hoop house at this point or...

WILL ALLEN:

04:12:17;22

Yes. And this is part of the training with the other folks that came to learn how to put up a hoop house, so they can go back to their communities and do the same thing. So a lot of these trainings, it's outreach training. It's one of the advantages of doing these regional trainings, is that

folks in that region can come and get this training. They don't have to come all the way to Milwaukee. And a lot of the funders like that, because it's less expensive for us to go out on the road, so we bring all of our equipment. This is a drivable distance for us, so we have some 24 foot trucks. We load 'em up with the supplies.

04:12:59;22

A lot of times, when we send a supply list to groups and they have to go out and get the supplies, they always come up short. They always miss stuff, so this makes it a lot easier for us, if it's a drivable distance for us to buy the supplies. Saves them money, 'cause we buy in bulk. And then we can make sure, when we go, we've got the lumber. We've got the pipe. We've got everything. It's organized. And it's much easier for us than when they try to purchase, even though we give 'em a very detail[ed], simple thing to go out and buy certain things.

QUESTION:

04:13:39;02

This is obviously [a hoop house]. Show us that. Tell us a little bit of what a hoop house is, for those of us who don't

know and how it fits into your system of...

WILL ALLEN:

04:13:48;19

Right. These hoop houses are a typical A-frame greenhouse, a permanent structure greenhouse that's usually anchored in concrete, has concrete floors, and you know, very expensive to build. This particular hoop house was one of the earlier ones we put up at D-Town. We brought all straight pipe and we bent those hoops into, with using a jig that we've developed, that we also trained people how to build a wooden jig to bend this pipe.

04:14:23;09

You save about half of the cost of purchasing that pipe, already bent. And we can put these up in a day. So this is how you extend a season or grow year round. You can put heaters in these. These are considered temporary structures. You drive the pipe in the ground. At any time, you can take this down. Doesn't take a whole lot. Probably the hardest thing of taking this down is getting the pipe that you drive into the ground out. You have to dig around it and pull it out.

04:15:00;07

But this is a cheap way of going into the business, versus building a permanent structure. So this is what's happening all over the country. USDA has a program to provide some funding for folks to put up these type of high tunnels. Some people call 'em high tunnels. Some people call 'em quonsets. Some people call 'em hoop houses or whatever.

04:15:26;27

But they're basically, they're covered with two layers of 16 mil poly. We normally put 'em up so that we have four feet from the ground up, so that we can open the side walls during the summer. You can put shade cloth on these and grow food in these year-round. Can switch from cool weather crops to warm weather crops. You can start your tomato crop earlier and get to the market earlier than the rest of the farmers. So that's one of the advantages of having these type structures. We're gonna put up over 100 more of these in Milwaukee at our farms to grow food year round, primarily in the wintertime.

QUESTION:

04:16:15;03

Okay, I'm not sure what that is. I'll let you tell us.

WILL ALLEN:

04:16:20;00

Okay, what they're doing here is they're growing shiitake mushrooms. You drill holes in the logs with a special drill. You put the spawn in the holes and you cover the holes in the logs with wax paraffin. And within a year, maybe a year and a half, you get your first blooms of mushrooms. I think this variety lasts for about two years. So you'll get blooms of mushrooms out of these logs, put 'em in the forest, for about, takes about a year and a half, two years, and they start blooming. And then they'll bloom for another couple years, before they go die off. Very productive, once they start blooming. You get these big blooms of mushrooms on 'em.

QUESTION:

04:17:13;11

I'm getting hungry thinking about it. Let me ask you a final question, you know, we're here at a museum. We're gonna preserve this interview for who knows how long, hundreds of years. I mean, you know, if knowing that you

can talk to the people who are gonna be watching this 100 years down the road, 75 years, is there something you'd like to say, something, a message of some kind to send to the future?

WILL ALLEN:

04:17:35;03

Well, I would say that looking back at George Washington Carver we're doing some of the same stuff that he was doing. What has it been, almost 100 years? So, I would think that 100 years from now, you're gonna be doing some of the same things. You might have a little twist to it, a little change, but people 100 years from now will still be growing food. Hopefully nutritious food in a way that's similar to what we're doing today. It's not gonna be that big of a change. There's definitely gonna be probably some innovations and so forth of how you do it, but it's basically gonna be conceptually the same way.